

What is claimed is:

1. A composition for culturing intestinal epithelial cell lines, comprising a cell culture growth medium supplemented with fetal bovine serum, nonessential amino acids, human transferrin, bovine insulin, human epithelial growth factor, sodium butyrate, hydrocortisone, progesterone, and testosterone.
2. The composition of claim 1, wherein the cell growth medium is DMEM/F-12 medium, supplemented with about 1% nonessential amino acids.
3. The composition of claim 1, wherein the concentration of each of human transferrin, bovine insulin and EGF is from about 0.01 to about 200  $\mu\text{g/ml}$ .
4. The composition of claim 1, wherein the concentration of each of hydrocortisone, progesterone, and testosterone is from about 0.01 to about 10  $\mu\text{M}$ .
5. The composition of claim 1, wherein the concentration of sodium butyrate is from about 0.05 to 5 mM.
6. The composition of claim 1, wherein the cell culture medium is supplemented with about 5 to about 20% fetal bovine serum.

7. The composition of claim 1, which comprises DMEM/F12 medium supplemented with about 10% fetal bovine serum, about 2 $\mu$ M L-glutamine, about 1% nonessential amino acids, about 100  $\mu$ g/mL human transferrin, about 30  $\mu$ g/ml bovine insulin, about 50 ng/mL human epithelial growth factor, about 2 mM sodium butyrate, and about 5  $\mu$ M each of hydrocortisone, progesterone, and testosterone.

8. A method for culturing an intestinal cell line in vitro, comprising resuspending the cells in a composition comprising cell culture growth medium supplemented with fetal bovine serum, nonessential amino acids, human transferrin, bovine insulin, human epithelial growth factor, sodium butyrate, hydrocortisone, progesterone, and testosterone; seeding the cells onto dry cell culture inserts; and incubating the cells at 37°C in 5% CO<sub>2</sub>.

9. The method of claim 8, wherein the cells are confluent and differentiated in about 4 days.

10. The method of claim 8, wherein the cell growth medium is DMEM/F-12 medium, supplemented with about 1% nonessential amino acids.

11. The method of claim 8, wherein the concentration of each of human transferrin, bovine insulin and EGF is from about 0.01 to about 200  $\mu$ g/ml.

12. The method of claim 8, wherein the concentration of each of hydrocortisone, progesterone, and testosterone is from about 0.01 to about 10  $\mu$ M.
13. The method of claim 8, wherein the concentration of sodium butyrate is from about 0.05 to 5 mM.
14. The method of claim 8, wherein the cell culture medium is supplemented with about 5 to about 20% fetal bovine serum.
15. The method of claim 8, wherein the intestinal cell line is a Caco-2 cell line.
16. A process for preparing a composition of cell culture media, comprising admixing under sterile conditions cell culture growth medium supplemented with fetal bovine serum, nonessential amino acids, human transferrin, bovine insulin, human epithelial growth factor, sodium butyrate, hydrocortisone, progesterone, and testosterone.
17. The process of claim 16, wherein the cell growth medium is DMEM/F-12 medium, supplemented with about 1% nonessential amino acids.

18. The process of claim 16, wherein the concentration of each of human transferrin, bovine insulin and EGF is from about 0.01 to about 200  $\mu\text{g/ml}$ .

19. The process of claim 16, wherein the concentration of each of hydrocortisone, progesterone, and testosterone is from about 0.01 to about 10  $\mu\text{M}$ .

20. The process of claim 16, wherein the concentration of sodium butyrate is from about 0.05 to 5 mM.

21. The process of claim 16, wherein the cell culture medium is supplemented with about 5 to about 20% fetal bovine serum.